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NOTICE OF ALLOWANCE AND FEE(S) DUE

881 7590 11/17/2009 STITES & HARBISON PLLC 1199 NORTH FAIRFAX STREET SUITE 900

ALEXANDRIA, VA 22314

EXAMINER					
PALENIK, JEFFREY T					
ART UNIT	PAPER NUMBER				
1615					

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,657	06/30/2005	Ruxandra Gref	P08535US00/BAS	5186

TITLE OF INVENTION: AQUEOUS DISPERSIONS OF NANOMETRIC OR MICROMETRIC PARTICLES FOR ENCAPSULATING CHEMICAL COMPOUNDS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/17/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

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A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

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APPLICATION NO.	FILING DATE			FIRST NAMED INVENT	FOR		ATTO	RNEY DOCKET NO.	CONFIRMATION N	о.
10/520,657	06/30/2005			Ruxandra Gref			PO	8535US00/BAS	5186	
TITLE OF INVENTION COMPOUNDS	N: AQUEOUS DISPER	SIONS OF NAM	NOMET	TRIC OR MICROME	TRIC	PARTICLES FO	OR EN	CAPSULATING CH	EMICAL	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE D	UE	PUBLICATION FEE D	UE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510		\$300		\$0		\$1810	02/17/2010	_
EXAM	INER	ART UNIT		CLASS-SUBCLASS	\neg					
PALENIK, J	EFFREY T	1615		424-499000	_					
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA ess an assignee is ident h in 37 CFR 3.11. Comp	nge of Correspon Indication form ed. Use of a Cust TO BE PRINTE	dence tomer		p to native ingle or a attor I be p r type r type ac pa	3 registered patent ely, 2 firm (having as a gent) and the name neys or agents. If a printed. e) tent. If an assigne assignment.	members of up	er a 2	scument has been file	ed for
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1199 NORTH FAI	RFAX STREET	ART UNIT	PAPER NUMBER			
SUITE 900 ALEXANDRIA, V	A 22314	1615 DATE MAILED: 11/17/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 442 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 442 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/520 657 GREF ET AL. Notice of Allowability Examiner Art Unit Jeffrey T. Palenik 1615 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to the amendment filed 4 November 2009. The allowed claim(s) is/are 1-10 and 12-25. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) Some* c) □ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: FR 0208766. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other .

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EXAMINER'S AMENDMENT

An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stephen J. Weyer on 4 November 2009.

The application has been amended as follows:

- a. In claim 17, line 7, delete [, and preferably between 1.2 and 2.1] after "3:1".
- b. In claim 21, line 12, delete [making use of] after "A method" and substitute therefor --comprising encapsulating chemical compounds by mixing---;
- c. In claim 21, lines 12-13, delete [for achieving encapsulation of] after "claim 1" and substitute therefor ---with---;
- d. In claim 21, line 13, after "chemical compounds" insert ---, thereby encapsulating the chemical compounds---;
- In claim 22, line 14, delete [making use of the composition] after "A method" and substitute therefor ---for progressive release of a compound comprising introducing the particles---;
- f. In claim 22, lines 14-15, delete [for achieving] after "claim 12" and substitute therefor
 ---into a medium, resulting in---;
- g. In claim 23, line 18, delete [making use of] after "A method" and substitute therefor ---for delivering---;

In claim 23, line 18, delete [where the] after "claim 15," and substitute therefor --comprising delivering the composition containing---;

- i. In claim 23, line 19, delete [is] after "compound (C)," and substitute therefor ---being---;
- j. In claim 23, line 19, delete [for the manufacture] after "medicament,";
- k. In claim 23, line 20, delete [intended to deliver] after "pharmaceutical composition,"
 and substitute therefor ----to a mucous membrane, thereby resulting in---;
- In claim 23, line 21, delete [at the level of a given] before "mucous membrane." and insert ---to the---, after "manner";
- m. In claim 24, line 1, delete [obtainable] after "A composition" and substitute therefor ---obtained---;
- n. Claim 25 is newly added ---The method of claim 17, wherein the polysaccharide macromolecules (B) introduced is between 1:2 and 2:1.---.

The following is an Examiner's statement of reasons for allowance: The closest prior art of Amiel et al. (Stimuli-Responsive Water Soluble and Amphiphilic Polymers -- ACS Symposium Series; Chapter 4: "Macromolecular Assemblies Generated by Inclusion Complexes between Amphiphilic Polymers and β-Cyclodextrin Polymers in Aqueous Media") disclose aggregate gel compounds that are composed of guest-host inclusion complexes. The guest-host inclusion complexes comprise aliphatically modified polysaccharide molecules (e.g. guests) which are complexed within β-cyclodextrin molecules (e.g. hosts), the resulting particle of which becomes insoluble in aqueous medium. The aggregates are formed through polymerization of the guest-

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host inclusion complexes. However, the compositions of the instant application have been clearly distinguished from those made of record in the prior art, as Amiel does not teach 1.) the formation of nano-scaled particles rather than gel-aggregates, 2.) the size range of any formed aggregates, and 3.) wherein at least 80% by mass of the compounds (A) and (B) present in the composition are contained in the particles. Since Applicants have distinguished over the art of record, the rejection of claims 1-10, 12-15 and 24 under 35 USC 103(a) as being unpatentable over the aforementioned Amiel et al. reference, which is presently still of record, **now stands withdrawn**.

Regarding the outstanding rejections under 35 USC 112, first and second paragraphs, Applicants' amendments discussed during the interview of 26 August 2009, are sufficient enough to overcome the rejections made to claims 1-10, 12-15 and 24.

Thus, the claimed invention is novel and unobvious over the prior art of the record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey T. Palenik whose telephone number is (571)270-1966. The examiner can normally be reached on 7:30 am - 5:00 pm; M-F (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on (571) 272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey T. Palenik/ Examiner, Art Unit 1615

> /Robert A. Wax/ Supervisory Patent Examiner, Art Unit 1615